

## DETAILED ACTION

### *Reasons for Allowance*

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Sharon Crane (Reg. No. 36,113) on January 6, 2009.

2. The application has been amended as follows:

In the specification:

Replace page 12, lines 22 and 23 with--

Figure 2 depicts the alignment of alpha interferon amino acid (SEQ ID NOS: 75-86) and nucleic acid sequences (SEQ ID NOS: 87-98)

Replace page 63, lines 1 and 2 with--

dimethylaminophenazo)benzoyl-arg-gly-val-val-asn-ala-ser-ser-arg-leu-ala-5-(2'-aminoethyl)-amino]-naphthalene-1-sulfonic acid) (SEQ ID NO:99)

Replace Table IV at page 99 with--

Table IV

Oligonucleotides needed for blockwise recombination: 18 oligonucleotides for alpha interferon shuffling

1. 5'-TGT [G/A] ATCTG [C/T] CT [C/G] AGACC (SEQ ID NO:57)
2. 5'-GGCACAAATG [G/A/C] G [A/C] AGAACATCTCTC (SEQ ID NO: 58)
3. 5' -AGAGATTCT [G/T] C [C/T/G] CATTTGTGCC (SEQ ID NO: 59)
4. 5' -CA GTTCCAGAAG [A/G] CT [G/C] [C/A] AGCCATC (SEQ ID NO: 60)
5. 5' -GATGGCT [T/G] [G/C] AG [T/C] CTTCTGGAACTG (SEQ ID NO: 61)
6. 5' -CTTCAATCTCTCA [G/C] CACA (SEQ ID NO: 62)
7. 5' -TGTG [G/C] TGAAGAGATTGAAG (SEQ ID NO: 63)

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8. 5' -GGA [T/A] [G/C] AGA [C/G] [C/G] CTCCTAGA (SEQ ID NO:64)
9. 5' -TCTAGGAG [G/C] [G/C] TCT [G/C] [T/A] TCC (SEQ ID NO:65)
10. 5' -GAACTT [T/G/A] [T/A] CCAGCAA [A/C] TGAAT (SEQ ID NO:66)
11. 5' -ATTCA [T/G] TTGCTGG [A/T] [A/T/C] AAGTTC (SEQ ID NO:67)
12. 5' -GGACT [T/C] CATCTTGGCTGTG (SEQ ID NO:68)
13. 5' -CACAGCCAGGATG [G/A] AGTCC (SEQ ID NO:69)
14. 5'-AAGAACACTCTTATCT (SEQ ID NO:70)
15. 5'-AGATAAAGAGTGATTCTT (SEQ ID NO:71)
16. 5'-TGGGAGGTTGTCAGAGCAG (SEQ ID NO:72)
17. 5'-CTGCTCTGACAACCTCCCC (SEQ ID NO:73)
18. 5'-TCA [A/T] TCCTT [C/A] CTC [T/C] TTAA (SEQ ID NO:74)

In the claims:

Claim 275 (Currently Amended) A method of producing a library [comprised of] comprising chimerized, defined polynucleotide sequences each of which [is comprised of] comprises a defined number of polynucleotide segments that are assembled in an ordered fashion, the method comprising:

- a) generating a plurality of defined polynucleotide segments selected from aligned substrate nucleic acid sequences, wherein said substrate nucleic acids encode full-length enzymes, and wherein boundaries defining the polynucleotide segments are selected from the aligned substrate nucleic acid sequences; and
- b) reassembling said defined polynucleotide segments in order thereby producing the library of chimerized, defined polynucleotide sequences, such that said segments are reassembled in an ordered fashion to produce each chimerized, defined polynucleotide sequence encoding a full-length enzyme, each of which [is comprised of] comprises a defined number of polynucleotide segments that are reassembled in an ordered fashion.

3. The following is an examiner's statement of reasons for allowance:

Claim 275 is allowed **based on the decision made by THE BOARD OF PATENT**

**APPEALS AND INTERFERENCES on February 25, 2008.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is (571)273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (571)272-0746. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571)272-0735.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

/Frank W Lu /  
Primary Examiner, Art Unit 1634  
January 13, 2009